AMERICAN RHODODENDRON SOCIETY

Eureka Chapter

Interesting articles to read while in Quarantine:

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Eureka Chapter
American Rhododendron Society

Rhododendrons in the Redwoods

April 2020

Virtual Plant Sale during Quarantine

The Eureka Chapter of the American Rhododendron Society will Not meet until further notice. But please enjoy the newsletter until we get to enjoy each other's company.

President's Message

As president of the Chapter, I would like to thank the Board for their willingness to work around all the complications associated with the Covid-19 pandemic. On behalf of our wonderful members, I thank you for your patience and understanding. I hope you are safe and well during this most unusual and troubling time. Your health and happiness is the board's top priority!

The board of directors for the Eureka Chapter has unanimously voted to postpone activity until such time that we, and following the lead of the ARS, have a safe go-ahead to resume activities. Again, this action is taken for the safety of our members and in the interest of public safety.

As of now, board meetings are conducted through emails. It is a cumbersome process, but board motions were recently passed to:

- Cancel the April board meeting and have meetings via email.
- Cancel the April 23, 2020 Program Terry Henderson, speaker
- Cancel the April 24-26, 2020 Flower Show and Sale
- Cancel the May 28, 2020 Mini Show
- Cancel the June 7, 2020 Garden Tour and Potluck
- Postpone Phase 2 for Hospice
- Postpone Nomination for new board members for the 2020-2021 fiscal year
- Purchase plants from Terry Henderson and establishing a sales program for the plants at the Walsh residence.

We will keep you apprised of announcements and progress reports through the monthly newsletter. The board can be reached by inquiries made through our website at www.EurekaRhody.org.

Sincerely,

Max Abrahamsen, President

WORD OF THE MONTH – VIRUS

By Bruce Palmer, From quarantine in Cutten CA

Here we are, stuck at home, needing to isolate ourselves from our friends, relatives, the Eureka Chapter and the rest of society. What better word than **VIRUS**? The word **virus** comes directly from the Latin, *virus*, a gooey substance or a poison. Recently, the term has been applied to problems in our computers, but technically, it is a biological term applied to very small particles containing only DNA or RNA and no cell organelles. It is still debated as to whether they are living, and in fact the existence of viruses is one of the obstacles to defining just what life is.

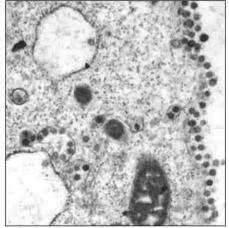
The discovery and early study of viruses is related to plants, not animals. The leaves of to-bacco plants have a disease now called the tobacco mosaic virus. In the late nineteenth century, researchers tried to isolate the agent, assuming it was a bacterium. It was not. In fact, they discovered that whatever the agent was could not be seen with the best light microscopes and that it passed through thin porcelain filters (thus the term used when I was a child, filterable virus). It was not until within my lifetime, in 1935, that the tobacco mosaic virus was crystalized to show that it was a biological substance; it could be crystallized but still be viable. It took the perfection of the electron microscope since World War II to obtain images of viruses. You may have seen

the scenes on TV of somebody looking through a light microscope, followed by a photo of the COVID-19 virus. That is extremely misleading. The practical limit of light microscopes is about 1,000X. Viruses require a magnification of at least 100,000X and detailed images like those we see on TV are closer to 500,000X. Only electron microscopes can resolve objects that small (newer electron microscopes can resolve objects at 1,000,000X).

Plants have a number of viruses, including witches' brooms (on our rhodies), burls such as those on our redwoods and lack of coloring on parts of leaves and tulip flowers. The early Dutch tulip traders valued mottled flowers most highly. Viruses in plant tissue are seldom fatal, unlike some in animals.

Viruses are tricky. They have no way to reproduce themselves, so they hijack a regular cell's reproductive mechanisms in order to multiply. Most viruses have a DNA helix surrounded by

protein. They invade the DNA of a cell and cause it to reproduce myriad copies of the virus while the cell DNA is replicating itself. Covid-19, though, is a retrovirus. Discovered only recently (HIV is a retrovirus), retroviruses contain RNA, not DNA. The usual order of copying and assembly in cells is that DNA makes various RNAs which make proteins. Retroviruses contain reverse transcriptase that can make DNA from an RNA template. That harmful DNA then produces new virus particles directly or invades the cell's DNA and acts like a regular virus. Regardless of how COVID-19 works, here we are, confronting a virus humans have never encountered before and to which we have no immunity. We must cancel our meetings and the flower show. Hopefully, we will be together again in September.





THANKS TO MEMBERS From Vice President Nelda Palmer

Thank you to all who have brought desserts for our meetings. Food always makes the moment more comforting. With the situation we have today we need all the comfort we can find. Put those teddy bears in the front windows and wave to your friends and neighbors. We will meet again when all this virus event is just a nasty memory.

Cardamine californica, AKA Milk Maids

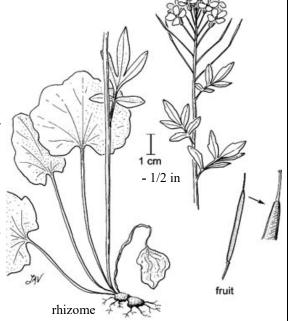
Last month I wrote about an imported thug weed *Cardamine hirsute*. This month I will tell you about its lovely native cousin, *Cardamine californica*.

Cardamine californica, or milkmaids, is an herbaceous flowering perennial plant in the family Brassicaceae. It is native to western North America from Washington to Baja California. It is common in a variety of habitats including shady slopes, open woodlands and grasslands.

Cardamine californica blossoms from January to May. Each flower is about 1/2 inch in diameter with four white to pale pink petals. The flower closes its petals in late afternoon as the sun goes down and nods before a rain. It grows by rhizomes (see the picture at right). Its young leaves are edible but not necessarily tasty, more like bitter horseradish which becomes more pronounced with maturity.

After flowering and setting seed it becomes dormant in the summer, until the rains return. You can hand pollinate to increase seed set.

At Humboldt Botanical Garden it grows in the Moss Regents of t Family Temperate Woodland Garden under spruce and fir, and among *Iris douglasiana* and *trillium ovatum*, which are naturally occurring on the site.



Cardamine californica
© Regents of the University of California

June Walsh is co-curator of the Moss Family Temperate Woodland Garden and a UC Cooperative Extension trained Master Gardener. Source; The Jepson Herbarium, UC Berkeley

Virtual Plant Sale

The Eureka Chapter will be taking delivery of rhododendron, azaleas and companion plants from Log Cabin Nursery soon. We will let you know when you can come to the Walsh's Rhody Hostel to shop. Social distancing will be employed, you will pick out the plants you want, load your vehicle and we will give you an invoice to be paid with cash or check.

A plant list will come with the Sale announcement so you can choose your plants ahead of time and we will collect them and arrange for your pick up. Special arrangement may be made for delivery.

DAFFODILS COME BEFORE THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE THE SWALLOW DARES, AND TAKE WITH BEAUTY. TRANSPORTED TO STREET THE SWALLOW DARES, AND TAKE THE SWALLOW DARES, AND THE SWALLOW DAR

Botanical name: Narcissus
Daffodil 'Devon Red'
Moss Family Temperate Woodland
Garden at Humboldt Botanical
Garden

Daffodils,

That come before the swallow dares, and take The winds of March with beauty.

-William Shakespeare (1564–1616)



Plant of the Month Rhododendron 'Kabarett' By Don Wallace

Rhododendron 'Kabarett' was created by Hans Hachmann of the Hachmann nursery in Germany, this striking rhododendron flower comes out a light lilac-violet color with a prominent deep burgundy red blotch or flare in the upper petal. Each blossom is very frilly, adding to the look. This hybrid sets lots of flower buds every year, adding to its value. Also, the foliage is very dark-green, leathery and glossy, and looks fantastic in a garden setting. Having some



'yak' in its breeding, the plant will be 4 ft. tall by 5-6 ft. wide in 10 years. Plant in full sun or partial shade in a well-draining soil that is rich in humus or bark. Mulch well. As with all rhododendrons feed with a well-balanced acid loving fertilizer in early spring and early summer for best growth and flowering.

This plant will be available in limited quantities in the Virtual Plant Sale. See page 3 for details.

Planting 2008 and Woll

Wollemia nobilis

The *Wollemia nobilis* of Australia have been saved from the raging fires in Australia by special fire crews and air dropped fire retardant in a Top Secret operation.

On the afternoon of October 26, 2019 an unseasonably warm Saturday following a run of hot days, the wind picked up over the Blue Mountains and lightning sparked what was to become the beginning of one of the biggest forest fires Australia has ever known. One bolt made ground near a densely grown area of the Wollemi National Park.

On January 15, 2020 the Sydney Morning Herald reported that firefighters had saved the *Wollemia nobilis* trees (commonly called the Wollemi Pine) of the Wollemi Mountains west of Sydney Australia. While most of the Wollemi National Park has been burnt by the fires north-west of Sydney, specialist fire crews managed to ensure the only existing stand of *Wollemia nobilis* survived.

"It was like a military-style operation," New South Wales Environment Minister Matt Kean told the *Herald*. "We just had to do everything." Fanned by strong winds and temperatures in the mid-80s the "fire tore towards the coast like a beast on holiday. It was voracious." "Wollemi National Park is the only place in the world where these trees are found in the wild and, with less than 200 left, we knew we needed to do everything we could to save them," Mr. Kean said.

There are fossils of the *Wollemia nobilis* as well as other *Araucariaceae* dating from the time of the dinosaurs (245 to 65 million years ago). In 1994 a *Wollemia* was found in the bottom of a canyon along a stream in Eastern Australia's Blue Mountains growing among flowering trees. Although the fossil records show that *Araucariaceae* relatives were growing worldwide there are now 41 species relegated to the Southern Hemisphere; South America, Australia, New Caledonia, Borneo and New Zealand. Colin Tudge, author of <u>The Secret Life of Trees</u>, writes "they are a relict group, and we should be grateful for the survivors".

There are two *Wollemia nobilis* in the Moss Family Temperate Woodland Garden. The first one came as a gift in 2008 from the National Arboretum in Washington DC. It had been acquired from the Sydney Botanical Garden in the first distribution of newly propagated trees. The second came to us in 2016 from a San Francisco Arborist who had received her tree in 2006 as a wedding gift. Both trees have had male cones and our first tree put on female cones in the summer of 2019.

We are grateful for the splendid *Wollemia nobilis* in the Humboldt Botanical Garden.

This article was originally published in the Humboldt Botanical Garden Newsletter Spring 2020 www.hbgf.org

June Walsh is co-curator of the Moss Family Temperate Woodland Garden and a UC Cooperative Extension trained Master Gardener.

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Eureka Chapter Newsletter is published monthly except during July, August and November.

Submissions from members are encouraged and should be sent to June Walsh, Newsletter Editor, by email RhodyHostel@suddenlink.net
Membership information and applications are available from Ellen Gill. https://html.html

Eureka Chapter is a member of the **Humboldt Botanical Gardens**, Eureka, CA and **The Rhododendron Species Botanical**, Federal Way, WA.

Eureka Chapter is a chapter of the American Rhodoendron Society a 501 (c) (3) charitable organization.

www.EurekaRhody.org



Eureka Chapter

American Rhododendron Society

Rhododendrons in the Redwoods

Future Programs

April 23, 2020 Member Meeting, Canceled

April 24-26, 2020 Canceled

48th Annual Eureka Chapter Rhodo Flower Show and Sale

April 29—May 3, 2020 Canceled

75th Annual ARS Convention Portland

May 28, 2020 Member Meeting, Canceled

Eureka Chapter Member Mini Show,

June 7, 2020 Canceled

Member Garden Tour and Potluck Picnic

July and August

Weed, Deadhead and enjoy your garden

September, 24, 2020 Dennis Bottemiller, the Rutherford Conservatory

October 24. 2020 Steve McCormick and John Stevens, Rhodos in Finland

January 23, 2021 Bruce Palmer, Plant Hunting with Joseph Rock

All programs subject to change, NO kidding!

While you are in quarantine shop online at the ARS Store. You can benefit the ARS by using

Amazon Smile. Whenever you shop at Target, Walmart, or Amazon, and Amazon

Prime please start here: www.ARSStore.org

These vendors send the ARS a small commission based on your purchase which benefits the ARS and does not cost you anything.

Eureka Chapter Officers and Board Members

For board member contact information or if you are interested in attending a board meeting which are held the first Wednesday of the month at 7PM, call or email June Walsh 707-443-0604